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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/516,678

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EXAMINER

DANG, HUNG Q

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/516,678	<b>Applicant(s)</b> SHINKAI ET AL.	
	<b>Examiner</b> Hung Q. Dang	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 04/23/2009 have been considered but are not persuasive.

On page 9, Applicant argues that, “[n]othing in Brook, et al. shows, teaches or suggests recording frame metadata near video and audio data so that the frame metadata and the video and audio data are arranged periodically on an optical disk.”

In response, Examiner respectfully submits that Brook discloses recording frame metadata near video and audio data on a magneto-optical disk (MOD) at least in [0135] and [0288] and further illustrated in Fig. 5. Examiner broadly interpret storing or recording the metadata and the audio data on the same storage medium to be "recording near" (e.g. vs. recording on different remote storage media). Further, as shown in Fig. 22, the metadata are periodically arranged, i.e. they are stored one after another while in Fig. 28, the video and audio are also stored in periodical arrangement.

In combining with Tezuka, which discloses the storage medium to be an optical disk, Brook and Tezuka discloses the feature of “recording frame metadata near video and audio data so that the frame metadata and the video and audio data are arranged periodically on an optical disk” in contrast with Applicant’s arguments.

On page 9, Applicant also argues, “nothing in Brook, et al. shows, teaches or suggests independently storing clip metadata for each clip in a contiguous manner.”

In response, Examiner respectfully submits that at least in [0290], Brook discloses the clip metadata independently in separate files while David discloses data series is recorded on a storage medium in contiguous units of sectors.

On page 10, Applicant argues, “[n]othing in Tezuka, et al. shows, teaches or suggests recording frame metadata near video and audio data so that the frame metadata and the video and audio data are arranged periodically.”

In response, without admitting any claimed deficiencies in Tezuka’s teachings, Examiner respectfully submits that this argument is moot in view of Brook’s teachings as discussed above.

Also, on page 10, Applicant argues, “nothing in Tezuka, et al. shows, teaches or suggests independently recording frame and clip metadata.”

In response, without admitting any claimed deficiencies in Tezuka’s teachings, Examiner respectfully submits that this argument is moot since Tezuka is not relied upon to disclose such feature.

On page 11, Applicant argues that, “[n]othing in David shows, teaches or suggests (a) both frame metadata and clip metadata and (b) independently storing frame metadata and clip metadata.”

In response, without admitting any claimed deficiencies in David’s teachings, Examiner respectfully submits that this argument is moot since David is not relied upon to disclose such feature.

Also on page 11, Applicant argues, a combination of Brook, Tezuka, and David would not be possible since David is not directed to an optical disk.

In response, the Examiner respectfully disagrees. David is relied upon to disclose data series to be recorded on a storage medium in contiguous units of sectors. One of ordinary skill in the art would recognize that using sectors as a recording and/or writing unit is well known in optical disks such as CD, DVD etc. and not only limited to tape media. Therefore, although the optical disk in Tezuka is not explicitly disclosed such feature, the motivation for incorporating such a feature into Tezuka is obvious to at least facilitate reading and writing of data as blocks (instead of controlling the read or write heads to read or write data onto the disk in a bit by bit manner and each bit is recorded in a separated or isolated location from other bits of the same piece of data). Therefore, the combination of Brook, Tezuka, and David is obvious in contrast with Applicant's arguments.

Also on page 11, Applicant argues that, "[e]ven assuming arguendo that the references could be combined, the combination would merely suggest to store all metadata in a metadata database as taught by Brook, et al., to record a table of contents in a lead-in area on a disk, as taught by Tezuka, et al. and to record information on a tape medium as taught by David. Thus, nothing in the combination of the references shows, teaches or suggests (a) periodically arranging frame metadata near video and audio data in a circumferential direction of an optical disk and (b) arranging clip metadata independently of the periodically arranged frame metadata and video and audio data."

In response, Examiner respectfully submits that this argument is moot for the reasons discussed above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Brook et al. (US 2003/0146915), Tezuka et al. (US Patent 5,206,850), and David (US 2002/0131763).**

Regarding claim 1, Brook et al. disclose a recording control apparatus for controlling recording of first, second, and third data series onto a storage medium ([0277], [0280], [0282], [0151], and [0290]), the apparatus is characterized by comprising: first data extracting means for extracting video and audio data having a first data amount for each frame from the first data series ([0277]; [0280]; [0282] – *first data amount being the data of one frame*), the first data amount being a data amount in accordance with a data amount required for reproduction of one frame of an image for first reproduction time ([0277]; [0280]; [0282] – *first reproduction time being the reproduction time of the one data frame*); second data extracting means for extracting frame metadata having a second data amount from the second data series, the second data amount being a data amount in accordance with a data amount required for reproduction of the frame metadata for second reproduction time that is different from the first reproduction time ([0280], [0282] – *second reproduction time being the reproduction time of the frame metadata*); first recording-control means for performing

recording-control to record data having the first data amount for the first data series and data having the second data amount for the second data series onto the storage medium so that frame meta data for each frame is recorded near the video and audio data recorded for each frame and the respective data are periodically arranged ([0277], [0280], [0282]; [0135]; [0288]; Fig. 22; Fig. 28 – Examiner interprets the frame metadata is recorded near the corresponding frame data because they are stored in the same storage medium MOD 512 – in Fig. 22, the data are periodically arranged, i.e. frame metadata is recorded for one frame after another – in Fig. 28, the video and audio data are also periodically arranged); and second recording-control means for performing recording-control to record the third data series onto the storage medium so that the third data series is arranged independently of the first data series and the second data series ([0290]), wherein the third data series is separately recorded and wherein the third data series is clip metadata recorded for each clip ([0290]).

However, Brook et al. do not disclose the storage medium to be an optical disk and the data are arranged in a circumferential direction of the optical disk in a form of annular rings, wherein the third data series is recorded at an inner circumference side in a continuous manner.

Tezuka et al. disclose a storage medium to be an optical disk and the data are arranged in a circumferential direction of the optical disk in a form of annular rings and data series is recorded at an inner circumference side of the optical disk (Fig. 1; column 1, lines 15-42; column 3, lines 29-33; column 6, lines 30-37).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the optical disk disclosed by Tezuka et al. into the recording control apparatus disclosed by Brook et al. because optical disks such as CD and DVD are very popular recording medium that conveniently provides portability and large capacity for storage.

However, the proposed combination of Brook et al. and Tezuka et al. does not disclose the third data series is recorded in a contiguous manner.

David discloses data series are recorded in a contiguous manner ([0010]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of David into the recording control apparatus disclosed by Brook et al. and Tezuka et al. because, according to David, the taught feature can facilitate the reading, writing, and modifying of the data (*David: [0012]*).

Regarding claim 2, David also discloses the first data amount is a data amount that is an integral multiple of a data amount in a physical unit area of the storage medium and that is close to a data amount required for reproduction for the first reproduction time ([0040]; [0008], [0009], [0046], [0047]); and the second data amount is a data amount that is an integral multiple of a data amount in the physical unit area of the storage medium and that is close to a data amount required for reproduction for the second reproduction time ([0010], [0040]; [0046], [0047]).



Regarding claim 3, David also discloses the physical unit area is a minimum area to/from which data writing/reading is performed or an area in which an ECC block on which ECC processing is performed is recorded ([0008], [0009], [0010]).

Regarding claim 4, David also discloses the first recording-control means causes the data having the first data amount for the first data series and the data having the second data amount for the second data series to be recorded onto the storage medium so that boundaries of the respective data match boundaries of physical unit areas of the storage medium ([0008], [0009], [0010], [0041], [0042]).

Claim 5 is rejected for the same reason as discussed in claim 3 above.

Regarding claim 6, Brook et al. also disclose the first data series is a data series of video or a data series of audio associated with the video ([0277], [0280]); the second data series is a data series of metadata that requires a real-time characteristic for the data series of video or the data series of audio associated with the video ([0280], [0282]); and the third data series is a data series of metadata that does not require a real-time characteristic for the data series of video or the data series of audio associated with the video ([0151], [0290]).

Regarding claim 7, Brook et al. also disclose for each clip that constitutes the material data in a predetermined area in the first data series, the third data series uses one file containing one of at least an LTC/UMID, GPS data, front-end time code, discontinuous-point time code information, a front-end extended UMID source pack, and a discontinuous-point extended UMID source pack ([0151]).

Claim 8 is rejected for the same reason as discussed in claim 1 above.

Claim 9 is rejected for the same reason as discussed in claim 1 above.

Claim 10 is rejected for the same reason as discussed in claim 1 above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2621

/HUY T NGUYEN/  
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